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10/574,500	04/03/2006	Markus Dillinger	1454.1708	9191

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EXAMINER

PATEL, MUNJALKUMAR C

ART UNIT	PAPER NUMBER
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4113

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,500	Applicant(s) DILLINGER ET AL.	
	Examiner Munjal Patel	Art Unit 4113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05/20/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 15-16,19-24, 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Prehofer et al. (NPL prehofer et. al., "Synchronized Reconfiguration of a Group of Mobile Nodes in Ad-Hoc Networks", IEEE, ICT 2003. 10th International Conference on Telecommunications, Volume 1, 23 Feb. - 1 Hatch 2003 Page(s) :400 - 405, Digital Object Identifier 10.1109/ICTEL.2003.1191266) herein after referenced as Prehofer.
2. Regarding claim 15, Prehofer discloses a synchronized reconfiguration of a group of mobile nodes in ad-hoc networks, Which reads on a radio system with at least one radio communication device, comprising:
3. A reconfigurable radio interface (anticipated in Prehofer: page 400, introduction & fig. 1.1);
4. A first memory in which normal operation configuration information is stored; a second memory in which error configuration information is stored (Prehofer: page 401, bullet 2 Reconfiguration procedure "The software is available at open node, e.g. a

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cellular connection from the internet or locally via an IC/USIM card. Some nodes may support both configurations");

5. A control unit configuring the reconfigurable radio interface (anticipated by Prehofer (Introduction) 'Change of radio layer "With software defined radio technology, nodes can reconfigure to new radio technologies", where the term 'software' implies a processor, or 'control unit', to execute that software.);

6. an error detection device detecting an error of the reconfigurable radio interface (anticipated by Prehofer: reconfiguration instruction 7 implies detection of the error);

7. And an error treatment device using the error configuration information to provide error treatment so that the reconfigurable radio interface is reconfigured (anticipated by Prehofer (pages 401 and 402) where reconfiguration instructions 7 and 8 deal with successful and failed reconfiguration attempts and the fallback to the original software condition in case of failure) ; wherein the error configuration information is used to enable communication between the radio communication device and the error detection device (anticipated by Prehofer: reconfiguration step 7 & 8 implies error configuration information being used to enable communication between radio communication device and error detection device).

8. Regarding claim 16, Prehofer discloses everything in claim 15 as above along with radio system is a mobile radio system (Prehofer: introduction discloses mobile nodes).

9. Regarding claim 19, Prehofer discloses everything in claim 15 as above along with reconfigurable radio interface has radio characteristics predetermined in at least one of the normal operation configuration information and the error configuration information(Prehofer: Reconfiguration procedure steps 7 & 8)

10. Regarding claim 20, Prehofer discloses everything in claim 15 as above along with one of the normal operation configuration information and the error configuration information contain at least some of the following radio characteristics of the reconfigurable radio interface: a transmit power of the radio-communication device, a modulation method to be used within a framework of radio communication, at least one frequency to be used within the framework of radio communication, at least one frequency band to be used within the framework of radio communication, and a communication protocol to be used within the framework of radio communication (Prehofer: fallback radio system attributes at the end of section 3.2" software radio configuration" Software can be downloaded to change radio layers of the nodes by SDR technologies. In the case of failures (wrong frequency, wrong modulation type, etc) nodes switch to previous radio standard and try to re-establish the connectivity).

11. Regarding claim 21, Prehofer discloses a radio communication device associated with a processor providing error treatment, comprising: a reconfigurable radio interface (Prehofer: page 400 introduction and fig 1.1) ; a first memory in which normal operation configuration information is stored; a second memory, in which error configuration information is stored (Prehofer: page 401, bullet 2 Reconfiguration procedure "The software is available at open node, e.g. a cellular connection from the internet or locally

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via an IC/USIM card. some nodes may support both configurations); and a control unit configuring said reconfigurable radio interface (anticipated by Prehofer: Introduction “ Change of radio layer with software defined radio technology, nodes can reconfigure to new radio technologies” where term software implies a processor or a control unit to execute that software) on occurrence of an error to set up a communication connection to the processor providing error treatment using the error configuration information; wherein the error configuration information is used to enable communication between the radio-communication device and the processor (anticipated by Prehofer: reconfiguration step 7 & 8 implies error configuration information is used to enable communication between radio-communication device and processor).

12. Regarding claim 22, Prehofer discloses everything in claim 21 as above along with radio communication device is a mobile radio communication device (Prehofer: Introduction discloses mobile nodes).

13. Regarding claim 23, Prehofer discloses everything in claim 22 as above along with radio communication device is a mobile radio telephone. (Prehofer discloses mobile communications and a cellular network within his article, implying telephone use mobile radio telephone & fig 1.1)

14. Regarding claim 24, Prehofer discloses everything in claim 22 as above along with radio communication device is a mobile radio module is rejected as being anticipated as Prehofer discusses mobile radios, which includes subcategory mobile radio module by inference.

15. Regarding claim 26, Prehofer discloses everything in claim 21 as above along with reconfigurable radio interface has radio characteristics given in at least one of the normal configuration information and the error configuration information as being anticipated by Prehofer which includes radio fallback to its default configuration in case of failure page 401 section 3.2 : Software radio reconfiguration.

16. Regarding claim 27, Prehofer discloses everything in claim 26 along with at least one of the normal operation configuration information and the error configuration information contain at least some of the following radio characteristics of the reconfigurable radio interface: a transmit power of the radio communication device, a modulation method to be used within a framework of radio communication, at least one frequency to be used within the framework of radio communication, at least one frequency band to be used within the framework of radio communication, and a communication protocol to be used within the framework of radio communication as being anticipated by Prehofer in his description of fall back radio system attributes at the end of section 3.2 'Software radio configuration': 'software can be downloaded to change the radio layers of the nodes by SDR technologies. In the case of failures (wrong radio frequency, wrong modulation type, etc) nodes switch to previous radio standard and try to reestablish the connectivity'.

17. Regarding claim 28, Prehofer discloses a method for modifying a reconfigurable radio interface of a radio communication device comprising (Prehofer: Page 401 Section 2 Reconfiguration procedure which discusses obtaining configuration information and configuring a mobile node or radio device):

18. detecting an error of the reconfigurable radio interface of the radio communication device (Prehofer: page 401, 402 Reconfiguration procedure steps 7 &8 where communication messages are monitored until a timer triggers the software to check for configuration failure internally and in other nodes); performing error treatment by a control unit using error configuration information stored in addition to the normal operation configuration information in the radio communication device; and configuring the reconfigurable radio interface in accordance with the configuration information (Prehofer: page 401 Reconfiguration procedure steps 7b & 8b where fall back to the old software and communicate with the other nodes with the old configuration implies storage of both old and new configurations, which implies processor or control unit to perform the algorithm and control the mobile node) wherein the error configuration information is used to enable communication between the radio communication device and an error detection device (anticipated by Prehofer: page 401 & 402 Reconfiguration steps 7 & 8 implies error configuration information being used to enable communication between mobile nodes).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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20. Claim 17, 18, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prehofer as applied to claim above, and further in view of Huilgol (US 6801762)

Regarding claim 17, Prehofer discloses everything in claim 16 as above, however, Prehofer fails to disclose error treatment device is integrated into an electronic chip separate from said control unit, However, the examiner maintains that it was well known in the art to provide error treatment device is integrated into an electronic chip separate from said control unit, as taught by Huilgol.

In a similar field of endeavor Huilgol discloses an Apparatus, and associated method, for placing an emergency call in a radio communication system. In addition, Huilgol discloses error treatment device is integrated into an electronic chip separate from said control unit (Huilgol: column 7 lines [1-4]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Prehofer by specifically providing error treatment device is integrated into an electronic chip separate from said control unit as taught by Huilgol, for the purpose of having separate logical control blocks.

21. Regarding claim 18, Prehofer in further view of Huilgol discloses everything in claim 17 as above, however Prehofer fails to disclose radio-communication device includes an emergency call device that sets up an emergency call even if the radio-communication device has a fault, however, the examiner maintains that it was well known in the art to provide radio-communication device includes an emergency call device that sets up an emergency call even if the radio-communication device has a fault, as taught by Huilgol.

In a similar field of endeavor Huilgol discloses an Apparatus, and associated method, for placing an emergency call in a radio communication system. In addition, Huilgol discloses radio-communication device includes an emergency call device that sets up an emergency call even if the radio-communication device has a fault (Huilgol: column 4 lines [12-21]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Prehofer by specifically providing emergency call device that sets up an emergency call even if the radio-communication device has a fault, as taught by Huilgol, for the purpose of application of operating the radio across multiple alternative communication system and reducing the likelihood of emergency call not being placed.

22. Regarding claim 25, Prehofer discloses everything in claim 21 as above, however Prehofer fails to disclose A radio-communication device in accordance with claim 21, further comprising an emergency call device that sets up an error-free emergency call communication connection even upon an error. However, the examiner maintains that it was well known in the art to provide an emergency call device that sets up an error-free emergency call communication connection even upon error, as taught by Huilgol.

In a similar field of endeavor Huilgol discloses an Apparatus, and associated method, for placing an emergency call in a radio communication system. In addition, Huilgol discloses an emergency call device that sets up an error-free emergency call communication connection even upon error (Huilgol: column 4 lines [12-21]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Prehofer by specifically providing emergency call device that sets up an error –free emergency call communication as taught by Huilgol, for the purpose of application of operating the radio across multiple alternative communication system and reducing the likelihood of emergency call not being placed.

Response to Arguments

23. Applicant's arguments with respect to claim 15 -28 have been considered but are moot in view of the new ground(s) of rejection.

24. In response to applicant's argument about “wherein the error configuration information is used to enable communication between the radio-communication device and the error detection device” is clearly anticipated by Prehofer as his reconfiguration procedure step 7 & 8 indicates each node will determine based on reconfiguration’s failure (i.e. configuration error) if it needs to fallback on default configuration or consider successful reconfiguration. All dependent claims and similar independent claims are justified proper as above including claim 17.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. US 20020119770 A1 : Class switched networks for tracking articles

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Munjal Patel whose telephone number is (571)270-5541. The examiner can normally be reached on Monday - Thursday 8:00 AM - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jefferey Harold can be reached on 571-272-7519. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Munjal Patel
Examiner
Art Unit 4113

mp
/Jefferey F Harold/

Supervisory Patent Examiner, Art Unit 4113